ABSTRACT

A peritoneal dialyzer 1 including: a catheter capable of injecting and discharging peritoneal dialysate in an abdominal cavity of a patient; a peritoneal dialysate circuit 2 connected to the catheter; and a dialyzer 3 provided in the peritoneal dialysate circuit 2, the dialyzer 3 including a hemodialysate circuit 4 connected so that peritoneal dialysate passing through the inside can come into contact with a hemodialysate via a hollow fiber membrane, characterized in that means 5 capable of measuring an osmotic agent concentration in the peritoneal dialysate is provided on the peritoneal dialysate circuit 2 on the side of the end at which the catheter is connected with respect to the dialyzer 3, and a mechanism 6 for dehydrating the peritoneal dialysate according to the osmotic agent concentration measured by the aforementioned means 5 is provided on the hemodialysate circuit 4, and a method of peritoneal dialysis using the peritoneal dialyzer 1. becomes possible to reduce time for dialysis treatment and the treatment cost by increasing the dialyzing efficiency and the dehydrating efficiency.